

SPECIFICATION AMENDMENTS

Change the title to:

**BATTERY SENSOR AND METHOD FOR THE OPERATION OF A
BATTERY SENSOR**

**BATTERY SENSOR AND METHOD FOR ACCURATELY
MEASURING BATTERY PARAMETERS WITH A LOW POWER
DRAIN**

Page 9, lines 19-28, replace the paragraph with the following paragraph:

Furthermore, the battery sensor 1 has an ammeter 99 that comprises an ammeter resistor 24, which can also be referred to as a shunt resistor. The ammeter resistor 24 is designed to have a very low resistance and can, for instance, have a resistance of around 100 $\mu\Omega$. The ammeter resistor 24 is connected in an electrically conductive manner both to a reference potential and, in an electrically conductive manner, to a negative terminal of the battery 2, that is, via an input 25 of the battery sensor 1. A second input 26 of the evaluation unit 3 is connected in an electrically conductive manner to the ammeter resistor 24 such that the voltage drop on the ammeter resistor 24 is shown on the second input, this voltage then being a measure of the current through the ammeter resistor 24.

Page 11, lines 1-8, replace the paragraph with the following paragraph:

The ammeter 99 can also comprise a low-pass filter which is connected upstream of the third input 26 and the time constant thereof is preferably adjustable as a function of whether an idle phase RP is in progress or not. Thus the time constant within the idle phase can be 3s for instance, and outside the idle phase it can be 3ms. Similarly, a low-pass filter can be assigned to the voltage divider, which is made up of the first-and-second-resistors first resistor 14 and the second resistor 16. Furthermore, corresponding low-pass filters can also be assigned to the voltmeters 36, 40. The voltage divider and the voltmeters 36, 40 can also be integrated with the evaluation unit 3.